Preliminary Avalanche Incident Report: "Backyards" Avalanche (One Victim) Closed Area within Mt. Hood Meadows Permit Area 3-7-03 – 12:05 PM

Report compiled by Asa Mueller (Mt. Hood Meadows Professional Ski Patrol – Lead Snow Safety Technician) 3-9-03

Summary:

NE exposure, 4800 ft, SS-AD-2—1 snowboarder caught, completely buried, and recovered alive by beacon within about 20 minutes. Depth of fracture unknown.

Accident Narrative

Midday Friday the 7th of March, a group of snowboarders riding at Mt. Hood Meadows decided to break a closure and go into an area that has been permanently closed. They received an important lesson from "the school of hard knocks." The area they were in was slated to open this winter but had remained closed due to lack of snowfall early in the season. The incident occurred during the largest storm cycle of the season to date with an avalanche hazard rating of high (courtesy of the Northwest Weather and Avalanche Center).

A loosely established party of at least four snowboarders started off from the top of the Hood River Meadows chair lift. They took the "Park Place" run to "Boardwalk", where they ducked under a rope line and headed into an area known by the Ski Patrol as "Backyards." The group was equipped with transceivers and claimed to have shovels and probes. They did not check in with the ski patrol to inquire about local avalanche danger or recent control results. The group did not conduct any stability tests or dig any snow pits. None of the interviewed members had any formal avalanche education. The avalanche victim claimed to have visited the area frequently during the last six or seven seasons and was familiar with the terrain.

"I came to a drop, looked good, and I went for it. When I landed I sunk and submarined forward becoming buried by snow and ice blocks. While under, I was lying in a creek bed, becoming soaked by water. I was trying to conserve energy," said the victim. It appeared that the victim dropped into a creek gully and triggered a small pocket of snow that caught and buried him in the bottom of a creek hole. Another member of the party said, "We were coming through a creek ravine and I stopped at the bottom to watch the rest of the party come down. I noticed that 'victim' came to a complete stop and was no longer visible. So we immediately switched our transceivers to search and began looking for him. We soon realized he had fallen into a sinkhole in the creek bed. It took about twenty minutes to dig him out. He was four feet under the snow. Thank God we found him!" He was reported to be alert, oriented, and quite relieved when recovered.

A member from another party in the area heard the commotion and was able to get close enough to get the message to go for help. He skied to the bottom of the Hood River Meadows chair and immediately called the ski patrol. At 12:05 p.m. a rescue response was initiated by the Mt. Hood Meadows ski patrol. The 'witness' was met by a ski patroller at the top of the Hood River Meadows chair and was brought back to the scene while an initial response team sped to the reported location. All parties involved in the rescue were accounted for and a guard was posted to keep any further people from entering the area. At 12:25 p.m. there was verbal confirmation of a live recovery from members in the

party located near the bottom of the slope and out of sight. The members of the initial response team descended via a controlled slope and met the party at the bottom. The victim was transported by snowmobile to the Hood River Lodge.

Snow pack and Control Results

Mt. Hood Meadows had received fifty inches of snow (measured at a manual snow stake in the base area) by 6:00 a.m. Friday the 7th from the storm cycle that had begun three days prior. The general snowpack structure consisted of a shallow faceting layer underlying a thin suncrust, with many new and sensitive snow layers on top. Avalanche control teams that worked near the area earlier that day reported one to three foot (possibly larger) crown faces from explosive triggered slides that took almost one hundred percent of each slide path. Similar results were seen area wide at the ski resort that morning. The slope that caught the snowboarder was at approximately 4800 feet with a northeast aspect, and was classified as an SS-AD-2.

Forecasts (taken from NWAC)

BACKCOUNTRY AVALANCHE FORECAST FOR THE OLYMPICS, WASHINGTON CASCADES AND MT HOOD AREA These forecasts apply to back country avalanche terrain below 7000 feet. They do not apply to highways or operating ski areas.

MT HOOD AREA.....

.....AVALANCHE WARNING.....

High avalanche danger above 4 to 5000 feet and considerable below Friday and Friday night, with greatest danger on southeast through northeast facing slopes. High danger above 5000 feet and considerable below Saturday morning, increasing significantly later Saturday afternoon and night and becoming high to extreme above 4 to 5000 feet and high below

.....AVALANCHE WATCH.....

High to extreme avalanche danger above about 4000 feet and high below Sunday morning, decreasing slightly mid-late Sunday and becoming high above 4 to 5000 feet and considerable below.

SNOWPACK ANALYSIS.....

In most areas, increasingly large amounts of new snow have loaded a variety of weaker layers or recent sun crusts during the past 48 hours, with two day totals now ranging from about 16 inches to over 50 inches. Along with some graupel layers that were received during heavy showers, these weak layers include some surface hoar from Monday night, some older lower density snow received last weekend that has persisted on sun shaded terrain, and some older faceted snow above an old crust from mid-February. Loading of these weak layers by strong wind transport of the heavy new snowfall amounts has resulted in a significant increase in the avalanche danger. In most areas a high avalanche danger and storm related soft slabs of 1-3 feet are likely above about 4 to 5000 feet, especially on wind loaded southeast through northeast exposures. These soft wind slabs may release on graupel, surface hoar or thin sun crusts, and some isolated deeper avalanches may step down to faceted snow layers above the old rain crust formed several weeks ago--especially on shaded northeast through northwest exposures. Field reports from many areas indicate that most slides are involving mainly the most recently deposited snow, with slabs of 1-2 feet releasing rather easily by both ski testing and explosive control. However these reports indicate that most slides are not running long distances yet. Although slightly less snowfall was reported along the Cascade east slopes since Wednesday, moderate amounts of new snow combined with strong ridge top winds have still produced a substantially increased danger, especially above 5000 feet where high danger is expected and human triggered slabs are likely. Back country travelers should note that the buried surface hoar may make some slabs quite sensitive, while the cold temperatures and strong winds

have probably produced rather cohesive and brittle wind slabs. Hence some avalanches on previously sun and wind sheltered terrain may be triggered from lower angled slopes (surface hoar as the weak layer), some fractures may propagate considerable distances (a very cohesive slab structure), and wind transported snow is likely to have been deposited lower than normal on lee- slope starting zones.

FRIDAY...FRIDAY NIGHT..... Heaviest rain and snow showers should slowly shift southward Friday, with heaviest snowfall and strongest winds likely in the southern Washington and northern Oregon Cascades Friday afternoon and night. However, moderate snowfall in the north and moderate to heavy snowfall in the south should still produce additional stress on existing wind slabs and buried weak layers, thus maintaining the generally high danger above about 4 to 5000 feet and considerable danger below into Friday afternoon in the north and through Friday night in the south. Significant 1-2 ft natural or human-triggered wind slabs should remain likely above 4 to 5000 feet and probable below, particularly on heavily loaded northeast through southeast exposures where some larger slabs up to 2 to 4 ft or more are probable. Briefly decreasing showers and winds late Friday-especially in the north and central Cascades- should allow for a slight and relatively brief decrease in the danger Friday night and early Saturday as loading rates decrease and recent wind slabs start to settle.

The Bottom Line

All parties involved received valuable insight and practice in rescuing an avalanche victim. Unfortunately these types of events with often times tragic outcomes appear to be happening at an accelerating pace. The hope is that events like this trigger a sense of appreciation, respect, and a desire to learn more about safe travel in the mountains, which we all love and must share.